

Claims after this response:

Claims 1-14 (Canceled)

15. (Withdrawn) The method of claim 13, wherein the distance value is determined by calculation of the Pearson correlation coefficient relative to the two vectors..

16. (Withdrawn) The method of claim 1, further comprising generating said pseudo-data vector from arbitrary data values.

Claims 17-20 (Canceled)

21. (Withdrawn) The method of claim 19, wherein said value for de-emphasizing is a null value.

Claims 22-47 (Canceled)

48. (Withdrawn) The system of claim 43, further comprising means for generating said pseudo-data vector from arbitrary data values.

Claims 49-64 (Canceled)

65. (New) A computer-implemented method for displaying and manipulating data, the method comprising:

storing an ordered data matrix comprising a plurality of measured values representing a plurality of different physical measurements performed on a plurality of samples, a plurality of sample descriptive values corresponding to each sample, and a plurality of measurement descriptive values corresponding to each physical measurement;

providing a two dimensional detail display having a plurality of cells, each cell corresponding to one of said values in said data matrix, said display providing a view of a portion of said data matrix that is defined by a base location in said data matrix;

calculating a pseudo-data vector comprising one value for each of said samples;

reordering said data matrix based on a measure of similarity between said pseudo-data vector and measured values of said data matrix; and

displaying on said display a new portion of said data matrix based on said re-ordering

66. (New) The method of claim 65, wherein said pseudo-data vector is calculated by assigning numerical data values to a selected portion of said sample descriptive values.

67. (New) The method of claim 66, wherein said selected sample descriptive values comprise binary data..

68. (New) The method of claim 66, further comprising color-coding cells of said selected sample descriptive values, said color-coding representing a function of the sample descriptive values in the cells.

69. (New) The method of claim 66, further comprising color-coding cells of said selected sample descriptive values, said color-coding representing the binary values of binary data.

70. (New) The method of claim 66, wherein at least one cell of said data matrix lacks a sample descriptive value, and wherein said calculation of said pseudo-data vector further comprises assigning a predefined null value to said cell lacking a sample descriptive value.

71. (New) The method of claim 67, wherein said assigning numerical data values to a selected portion of said sample descriptive values comprises substituting predefined pseudo-data values for positive and negative annotative binary data values in said selected portion of said sample descriptive values.

72. (New) The method of claim 66, further comprising inverting the numerical data values that are assigned to said selected portion of said sample descriptive values.

74. (New) The method of claim 65, wherein said measure of similarity comprises calculating a distance value between the pseudo-data vector and a vector generated from a select set of said measured values.

75. (New) The method of claim 74, wherein said distance value is determined by calculating a squared Euclidean distance between said two vectors.

76. (New) The method of claim 65, wherein said calculating a pseudo-data vector comprises receiving values inputted by a user.

77. (New) The method of claim 65, wherein said assigning numerical data values to a selected portion of said sample descriptive values comprises substituting a first predefined

pseudo-data value for emphasizing each cell in a sub-portion of said selected portion of said sample descriptive values, and a second predefined pseudo-data value for de-emphasizing each remaining cell of said selected portion of said sample descriptive values.

78. (New) The method of claim 77, wherein said first predefined pseudo-data value for emphasizing is a positive value inputted by a user.

79. (New) The method of claim 77, wherein said predefined pseudo-data value for de-emphasizing is inputted by a user.

80. (New) The method of claim 1, further comprising transmitting data representing a result obtained to a remote location.

81. (New) The method of claim 1, further comprising receiving a result obtained from a remote location.